



DISCOVER FSC BLOCKCHAIN

Webinar, February 2024

Presenters: Steve Ball, Loa Worm, Julie Smith





Please place questions in the Q&A

We will make time at the end after the recording has been paused.

**Blockchain FAQ is available at
[fsc.org/blockchain](https://www.fsc.org/blockchain)**



AT A GLANCE

Today we lead the world's most rigorous and trusted forest certification system, trusted by NGOs, consumers, and businesses alike.

29

years of operation

150+

million certified hectares of forest

1,200+

individuals and organizations make up our governing body across 92 countries

85

locally-adapted forest stewardship standards

46%

of consumers globally recognize the FSC logo

1,600+

companies licenced to promote FSC-labelled products

50K+

certifications that verify sustainable sourcing

#1

most recognized, trusted, and rigorous forest certification system

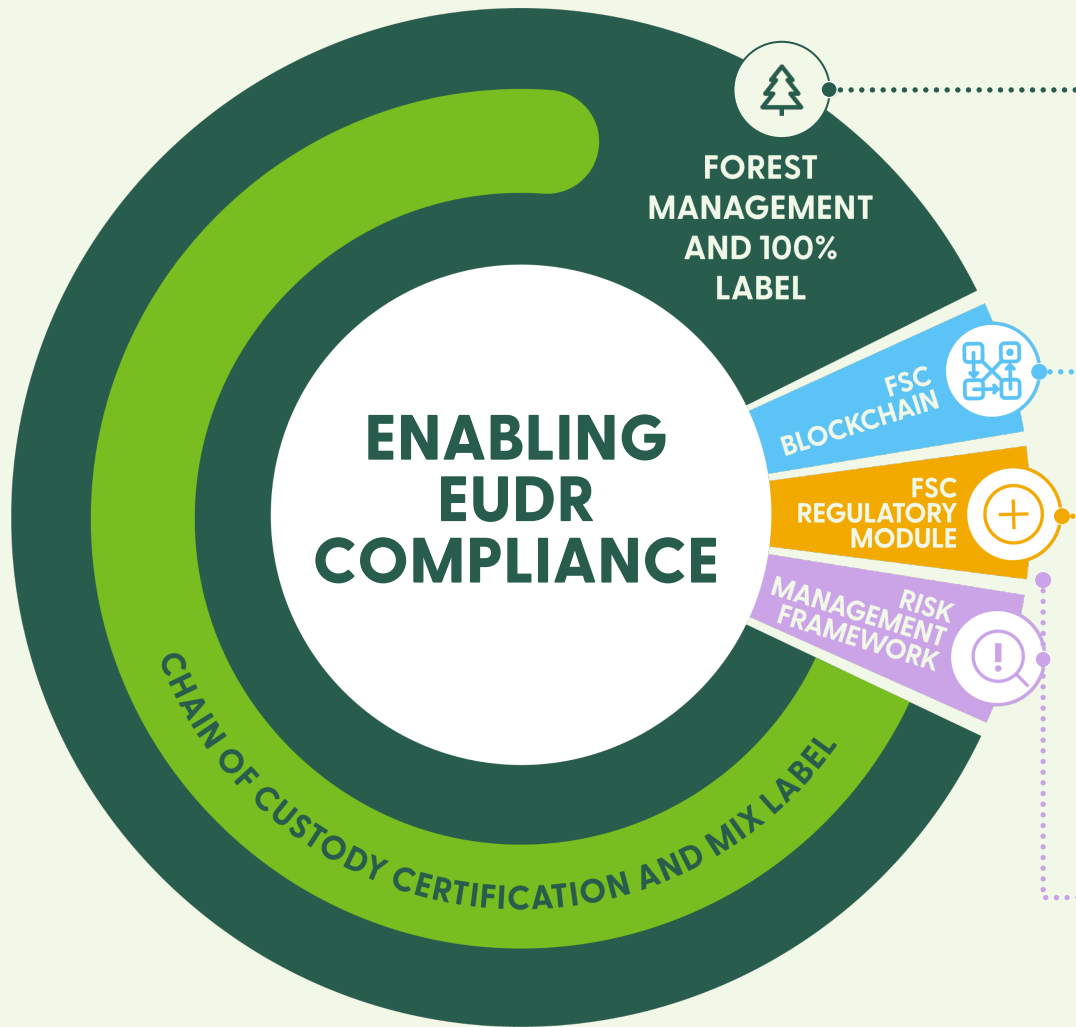


NAVIGATING THE TIDE IN DATA REQUIREMENTS: FSC'S ROLE IN SUPPORTING GLOBAL SUSTAINABILITY EFFORTS

We are committed to supporting our stakeholders in the shifting compliance landscape and the increase requirement for data. Our approach involves offering innovative tools and resources, ensuring that companies not only comply but also find the workload reasonable and doable.

Advancing certification compliance

We're bringing together people and organizations to create new solutions for protecting the health and resilience of forests everywhere – at every step of the supply chain.



As the most credible global sustainable forestry solution, **FSC certifications already deliver on numerous EUDR requirements.**

FSC EUDR ALIGNED will enable companies throughout forest supply chains to meet their EUDR obligations.

FSC BLOCKCHAIN* will enable companies to track the material's journey through the entire supply chain, meeting EUDR traceability requirements and providing the ability to generate due diligence statements for submission to the EU.

FSC REGULATORY MODULE** will provide additional requirements enabling companies to meet EUDR deforestation, degradation, and legality requirements.

FSC's RISK MANAGEMENT FRAMEWORK*** will provide revised risk assessments aligned with the EUDR, relieving certified and non-certified operators from significant effort. **FSC's NEXT GENERATION RISK ASSESSMENTS** will become available, significantly relieving risk management efforts for companies.

*FSC.org/Blockchain, **FSC-STD-01-004 FSC Regulatory Module, ***FSC-PRO-06-006b Risk Assessment Framework

From the forest to the shelf...



Forest Management (FM)
certification

Chain of Custody (CoC) certification

Promotional
Licence

CoC alone is insufficient to trace products
through the supply chain for EUDR.

 Geolocation

 Traceability across transfers of ownership

What will FSC Blockchain enable us to do?



 Geo Location





 Time of Harvest

Stock





 8°33'70", 47°22'74"
 1/1/2023 – 10/1/2023





 7°45'11", 6°22'28"
 10/7/2022 – 11/7/2022



 14°33'70", 47°21'74"
 11/2/2023 – 11/6/2023







 18°23'75", 61°23'47"
 20/5/2023 – 25/5/2023





Production

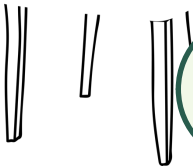




 8°33'70", 47°22'74"
 1/1/2023 – 10/1/2023

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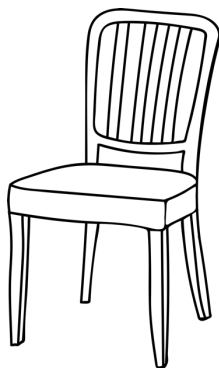
Sale

 8°33'70", 47°22'74"
 1/1/2023 – 10/1/2023

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 14°33'70", 47°21'74"
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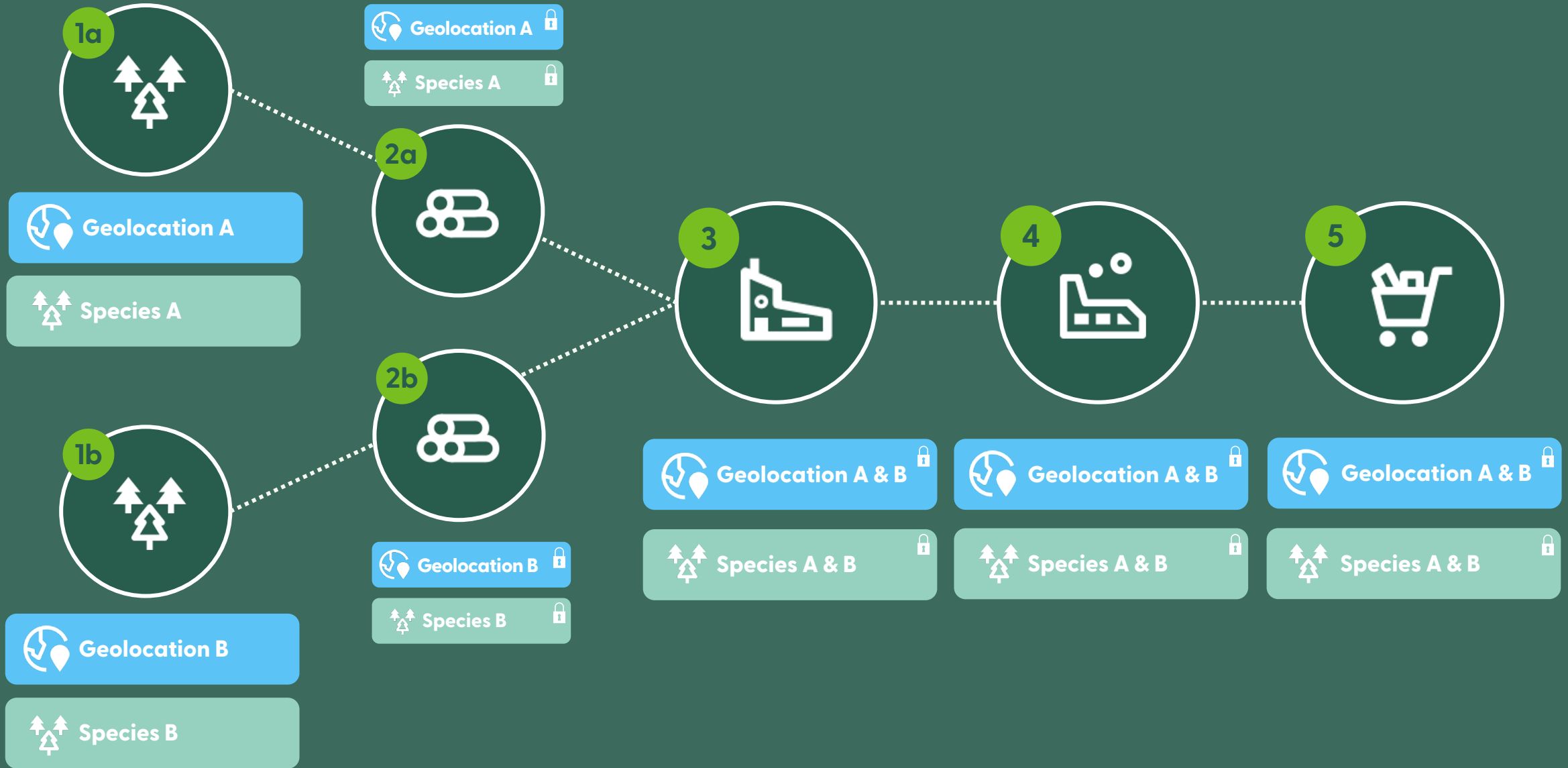
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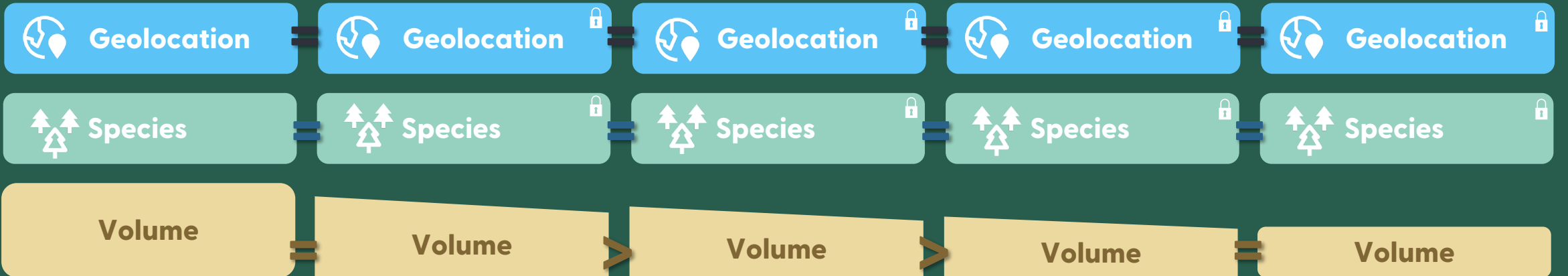
Traceability allows us to transmit product data along the supply chain



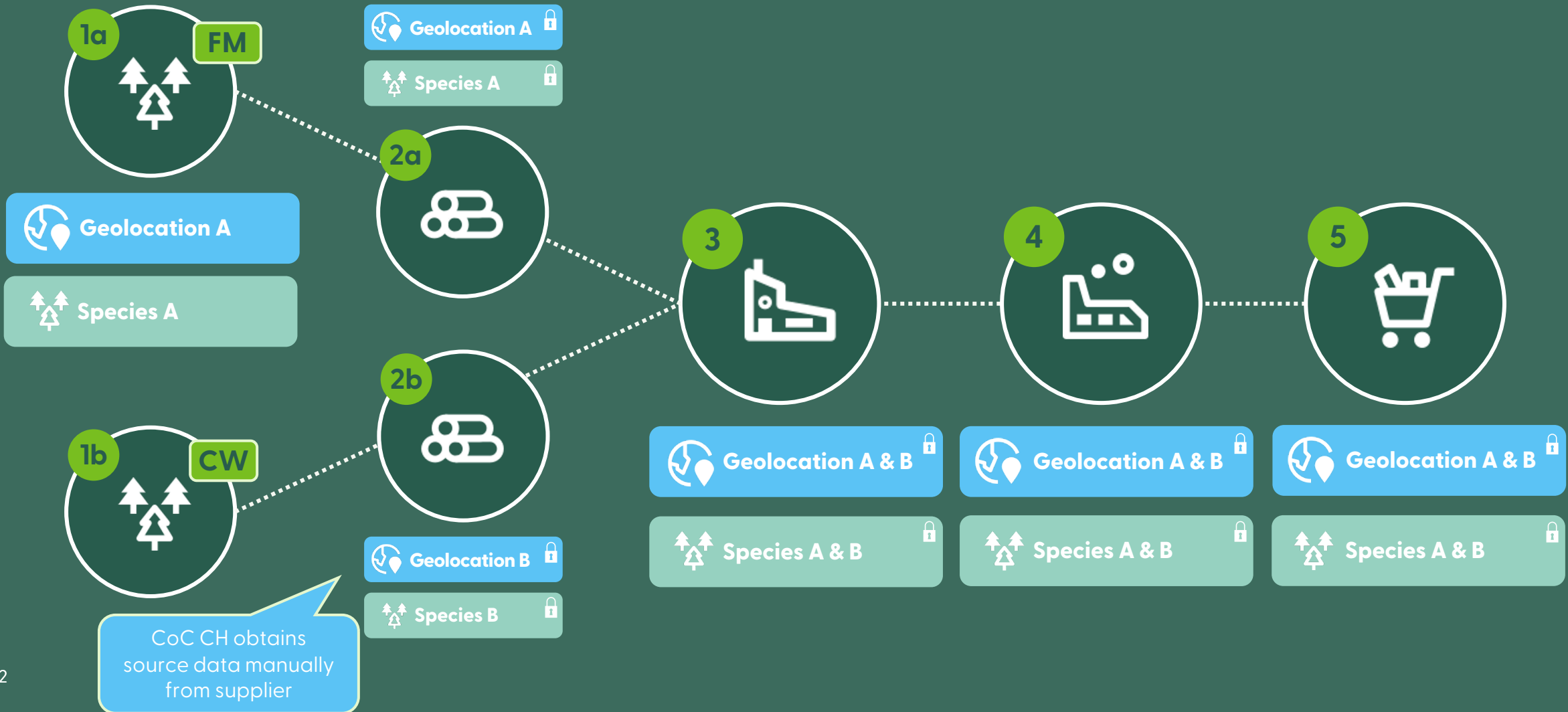
We can combine data in composite products



Technology scales to even the most complex supply chains

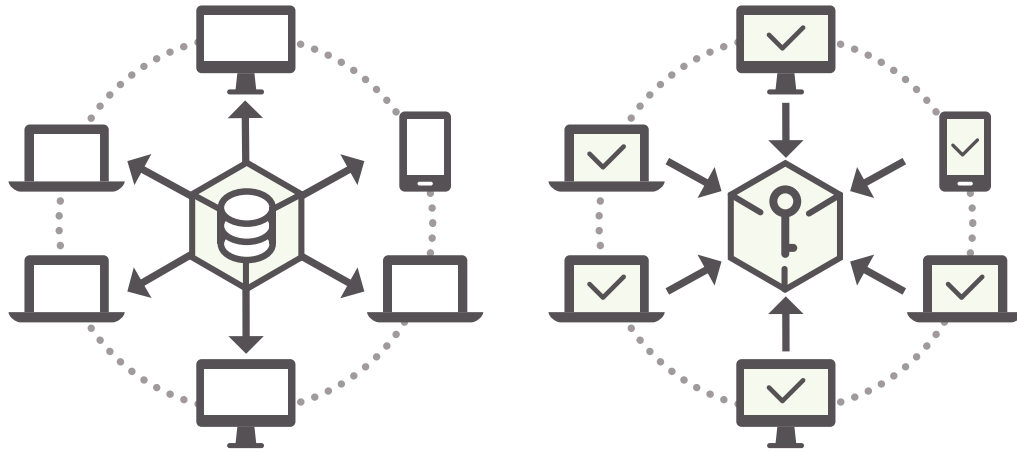


For FSC Controlled Wood we capture the source data later in the chain



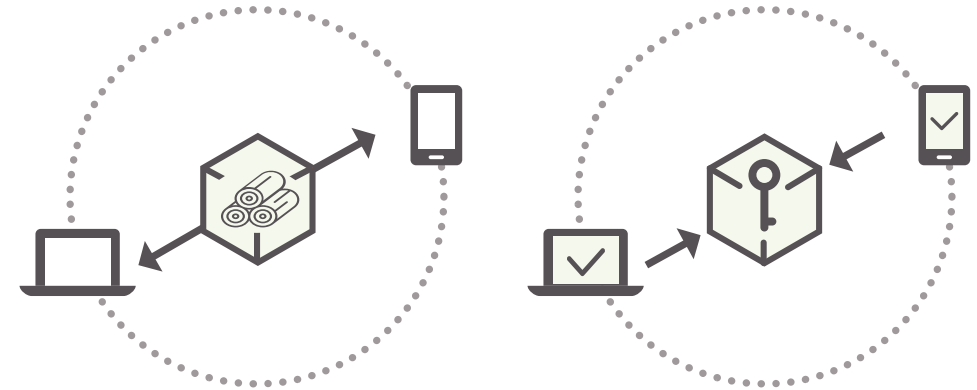
What is blockchain technology?

At the heart of blockchain technology is an immutable ledger that ensures the integrity of transaction data is ensured against malicious edits.



Public blockchain

Open and decentralized. All nodes verified by all other nodes and therefore highly energy consuming. Think bitcoin and similar.



Consortium blockchain


A semi-private, permissioned network where access is controlled, offering enhanced security and efficiency tailored to the industry.

Which types of data will FSC Blockchain get me?



PRODUCT TYPE & CLASSIFICATION

Record product categories as per FSC standards, with optional international HS codes for global trade and customs compliance.


FSC Blockchain Beta

Dashboard Record A Trade View Claim History Data Sharing Account English

Home / RecordTrades / SingleTransaction

Transaction Info	Sales Document ID * <input type="text" value="Sales Document ID"/>	Invoice Date * <input type="text" value="Invoice Date"/>
	Batch ID * <input type="text" value="Batch ID"/>	
Product Details	Product * <input type="text" value="Product"/>	
	FSC Category <input type="text" value="FSC Category"/>	HS Code * <input type="text" value="HS Code"/>
	Species <input type="text" value="Species"/>	
Sustainability Claim	FSC Claim Type * <input type="text" value="Select an option"/>	Percentage Claim <input type="text" value="Percentage Claim"/>
Consignment Size	Quantity * <input type="text" value="Quantity"/>	Total Volume (CBM) * <input type="text" value="Total Volume (CBM)"/>
Harvesting Info	Harvest Start Date * <input type="text" value="Harvest Start Date"/>	Harvest End Date * <input type="text" value="Harvest End Date"/>
	<input type="button" value="Upload GeoJSON"/>	Number Of Polygons <input type="text" value="Number Of Polygons"/>

Which types of data will FSC Blockchain get me?



SPECIES VERIFICATION

Confirm the exact species used in your product, ensuring authenticity and compliance.

Home / RecordTrades / SingleTransaction

Transaction Info

Sales Document ID *

Invoice Date *

Batch ID *

Product Details

Product *

FSC Category

HS Code *

Species

Sustainability Claim

FSC Claim Type *

Percentage Claim

Consignment Size

Quantity *

Total Volume (CBM) *

Harvesting Info

Harvest Start Date *

Harvest End Date *

Number Of Polygons


[Upload GeoJSON](#)

Which types of data will FSC Blockchain get me?



VOLUME / MASS / WEIGHT METRICS

Flexible recording by volume or weight, with unit customization for market-specific requirements, like EUDR.


FSC Blockchain Beta

Dashboard Record A Trade View Claim History Data Sharing Account English

Home / RecordTrades / SingleTransaction

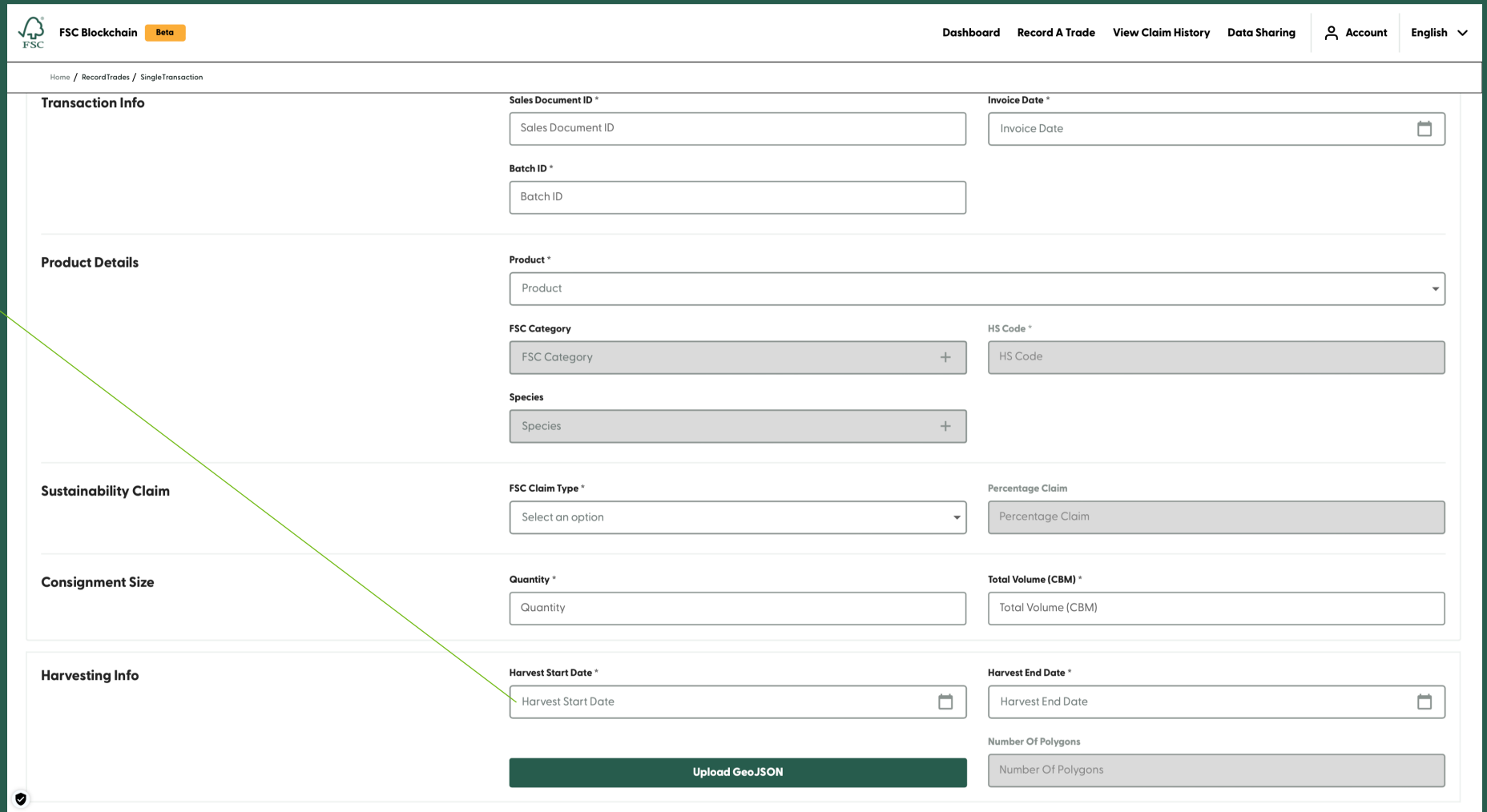
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Harvesting Info	Harvest Start Date * <input type="text" value="Harvest Start Date"/>	Harvest End Date * <input type="text" value="Harvest End Date"/>
	<input type="button" value="Upload GeoJSON"/>	Number Of Polygons <input type="text" value="Number Of Polygons"/>

Which types of data will FSC Blockchain get me?



GEOLOCATION TRANSPARENCY AND HARVEST TIMING

Provide geolocation data for the source harvesting block and precise harvest start and end dates, an optional but significant detail for regulatory adherence.



Home / Record Trades / Single Transaction

Transaction Info

Sales Document ID *
Sales Document ID

Invoice Date *
Invoice Date

Batch ID *
Batch ID

Product Details

Product *
Product

FSC Category
FSC Category +

HS Code *
HS Code

Species
Species +

Sustainability Claim

FSC Claim Type *
Select an option

Percentage Claim
Percentage Claim

Consignment Size

Quantity *
Quantity

Total Volume (CBM) *
Total Volume (CBM)

Harvesting Info

Harvest Start Date *
Harvest Start Date

Harvest End Date *
Harvest End Date

Number Of Polygons
Number Of Polygons


Upload GeoJSON

Which types of data will FSC Blockchain get me?




COUNTRY OF PRODUCTION

Track the production country at each supply chain point, vital for compliance with regulations.



FSC Blockchain Beta

[Dashboard](#)
[Record A Trade](#)
[View Claim History](#)
[Data Sharing](#)

 Account
 English ▾

[Home](#) / [RecordTrades](#) / [SingleTransaction](#)


Transaction Info	Sales Document ID * <input type="text" value="Sales Document ID"/>	Invoice Date * <input type="text" value="Invoice Date"/>
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Harvesting Info	Harvest Start Date * <input type="text" value="Harvest Start Date"/>	Harvest End Date * <input type="text" value="Harvest End Date"/>
	<input type="button" value="Upload GeoJSON"/>	Number Of Polygons <input type="text" value="Number Of Polygons"/>

Which types of data will FSC Blockchain get me?




UPLOAD ATTACHMENTS AND DATA

Add attachments and additional data fields to an individual trade.



FSC Blockchain Beta

[Dashboard](#)
[Record A Trade](#)
[View Claim History](#)
[Data Sharing](#)

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Transaction Info

Sales Document ID *

Batch ID *

Invoice Date *

Product Details

Product *

FSC Category

Species

HS Code *

Sustainability Claim

FSC Claim Type *

Percentage Claim

Consignment Size

Quantity *

Total Volume (CBM) *

Harvesting Info


Harvest Start Date *

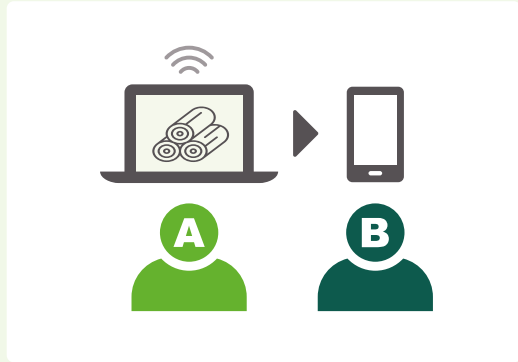
Harvest End Date *


Upload GeoJSON

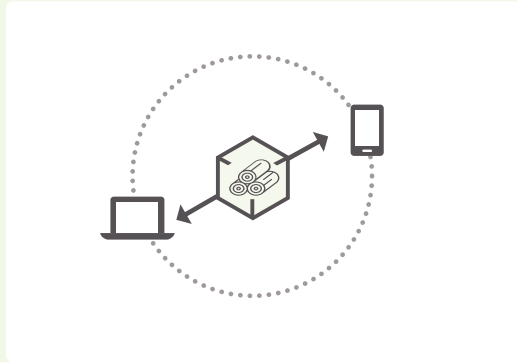
Number Of Polygons


How does a trade get verified on FSC Blockchain?

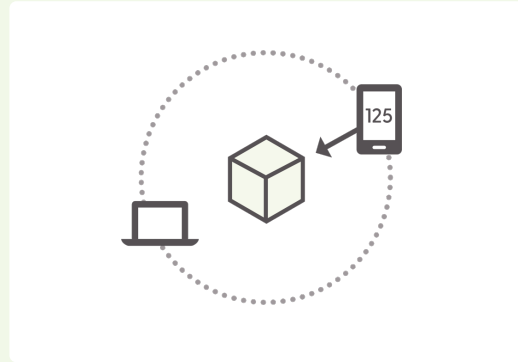
 Enter a trade




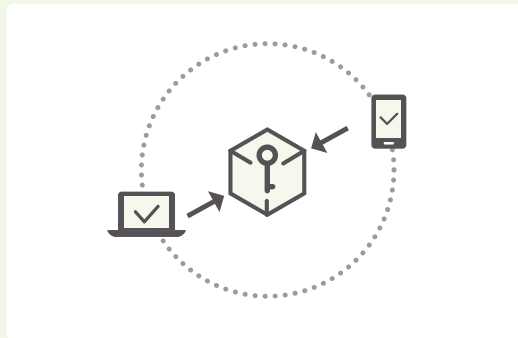
 Trade appears on both partners records



 The counterparty enters the volume to confirm




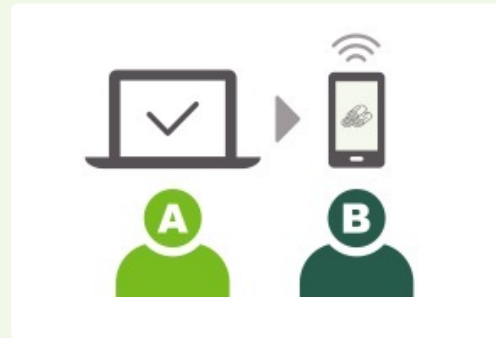
 If volumes match, the transaction is matched



 The block is added to the blockchain



 The volume now appears with both partners



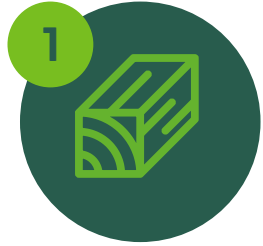
When is a trade matched?

Trading parties must agree on the following :

- FSC licence codes
- Invoice date
- Product category
- Species composition
- Quantity (*either volume or weight, within a small margin of error*)

If either of these does not match, the transaction will not be written to the blockchain as a matched claim but remain “unmatched”

Setting up FSC Blockchain



Configure products

Set up your products and their variations.

Define Product

Product Code * <input type="text" value="Product Code"/>	Product Name * <input type="text" value="Product Name"/>
Trading Direction * <input type="text" value="Select an option"/>	Select an option <input type="text" value="FSC Product Category"/>
HS Code <input type="text" value="HS Code"/>	Species <input type="text" value="Species"/>
Volume * <input type="text" value="m³"/> <input type="text" value="0"/>	Weight <input type="text" value="kg"/> <input type="text" value="0"/>
Starting Inventory * <input type="text" value="0"/>	

Save Product



Configure trading partners

Connect to your trading partners and invite them to join blockchain.

Define Trading Partner

Licence Code ② <input type="text" value="Licence Code"/>	Certificate Code * ② <input type="text" value="Certificate Code"/>	Site Code ② <input type="text" value="Site code"/>
Internal Reference ID ② <input type="text" value="Internal Reference ID"/>	Organisation Name * ② <input type="text" value="Organisation Name"/>	Partner Type * ② <input type="text" value="Select an option"/>

Save Trading Partner

Video demo of FSC Blockchain

Available in recording of webinar on [fsc.org/blockchain](https://www.fsc.org/blockchain)

How can certificate holders upload data to FSC Blockchain?



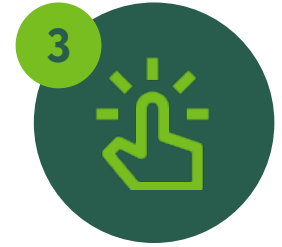
Direct Entry

- Individual transactions recorded directly on the FSC Blockchain via the application website.
- User-friendly and accessible
- Mainly aimed at micro companies or companies occasional trade of FSC.



Bulk Uploads

- Bulk uploads of claims using spreadsheets
- Can cover multiple transactions over a specific period.
- Efficient for managing large volumes of data and periodic uploads.
- Expected to be the widest used method in the beginning.



API Integration

- Integration of FSC into own systems using an Application Programming Interface (API).
- Automates the data transfer in both directions.
- Will require IT investments from certificate holders in setup.
- APIs will be provided by FSC for the most commonly used platforms in key regions.

Blockchain: data confidentiality v transparency

Sensitive Commercial Data

A COMPANY'S SUPPLIERS AND TRANSACTION VOLUMES ARE HIGHLY SENSITIVE COMMERCIAL DATA

- Such data may also be subject to regulation where it might impinge upon stock prices



Encryption & Selective Decryption

ALL DATA ENCRYPTED AT POINT OF UPLOAD

- Data owner controls what data can be shared and with whom
- Customers can request access
- Rules system (like email sorting rules) allows for flexibility & precision
- Data sharing can be revoked at any time
- Even FSC will not have access to transaction data

Blockchain: data sharing flexibility



CHOOSE WHAT TO SHARE

- Supplier Identity
- Origin Data
- Attached Documents by category
- Risk Assessments & Mitigating Actions



CHOOSE BASIS OF SHARING

- Per Transaction
- Per Customer



CHOOSE RIGHTS GRANTED

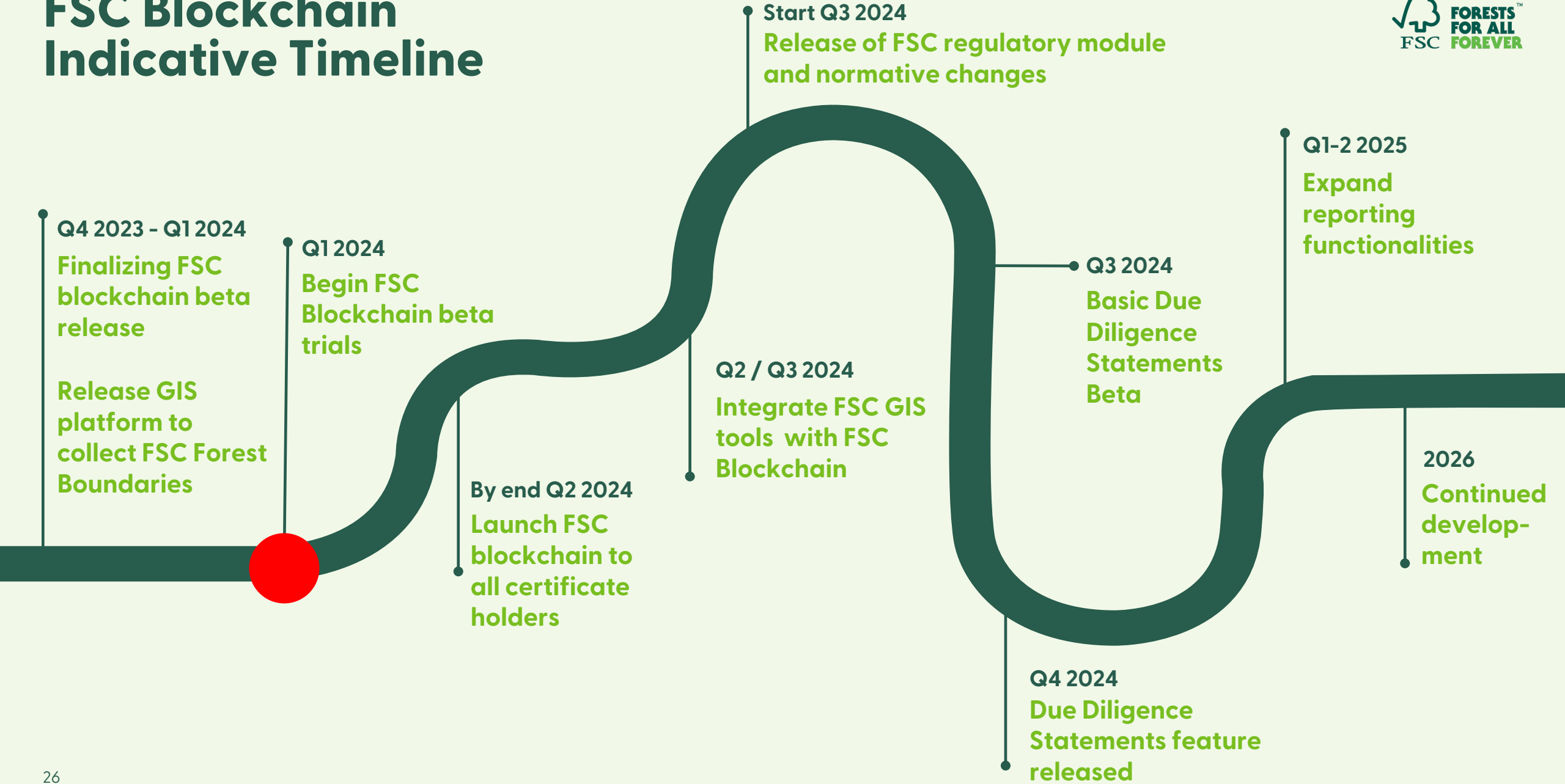
- Requester can see data, but cannot share with others
- Requester can see data, and onward share with their customers without your pre-approval



CHOOSE PERIOD COVERED

- One transaction only
- All transactions within a defined period of time
- All transactions to date
- All future transactions

FSC Blockchain Indicative Timeline



Ready, Set, Prep for FSC Blockchain



Beta Trials – informing the future of FSC Blockchain



Invitation from companies already in the trials

Current trial participants may invite up to 3 partners each.



Sign up for priority access

Indicate your interest via our online form on fsc.org/blockchain

(Find the link in question 12 in the FAQ)

Support and training



RECURRING WEBINARS

Interactive live webinars provide real-time insights and expert answers to bring you up to speed with blockchain applications and updates.



GUIDANCE AND TRAINING MATERIALS

Training programs and comprehensive guides ensure you have the knowledge and skills to navigate FSC blockchain confidently



DEDICATED HELPDESK

Our dedicated helpdesk ready to assist users with technical or operational queries they may encounter.

Benefits of using FSC Blockchain



STATUS OF CERTIFICATION

Automatic verification of certification status of suppliers & their certificate scope.



AUTOMATED COC REPORTING

FSC Blockchain will create reports on

- Volume summary
- Species list
- Product group list



ATTACHING LEGALITY DOCS

Users can attach and share critical documents, such as harvesting permits, to ensure they travel with the consignment data.



EASY DATA SHARING

FSC blockchain makes it easy to share data, e.g. harvesting location, with your downstream trading partners.



ALL DUE DILIGENCE DATA IN ONE PLACE

Everything you need to demonstrate due diligence collected together in one system.

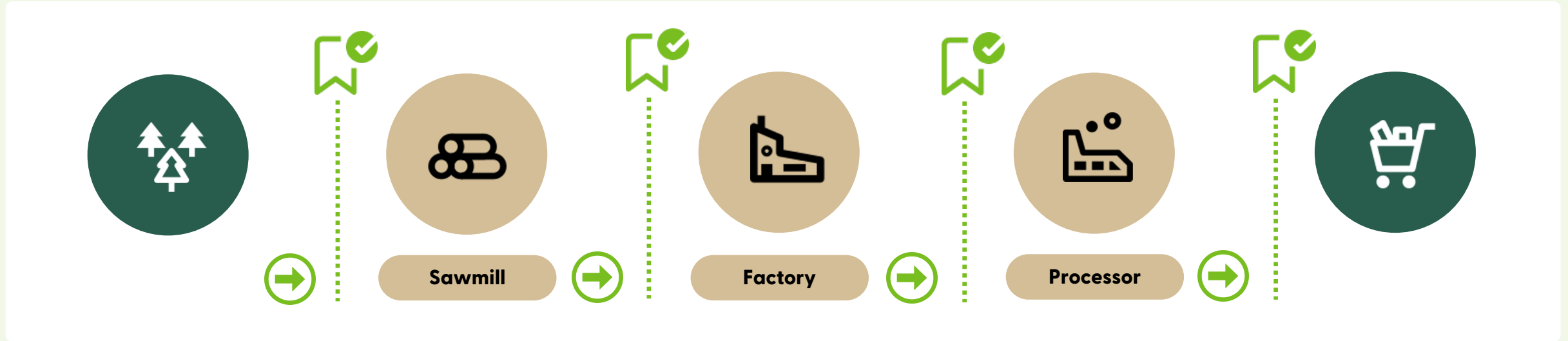
Only your company
on FSC Blockchain

All of your supply
chain on FSC
Blockchain



fsc.org/blockchain

Summary of what will FSC Blockchain does



- ✓ **Licence Holders enter their purchases and sales** of FSC-certified products
- ✓ **Products are automatically checked against certificate scope and validity**
- ✓ **Transactions are matched** against entries made by the counterparty – when a match is achieved the **transaction is written to the Blockchain**

- ✓ **All data stored is encrypted** – decryption keys provided to downstream customers based on rules set by the supplier
- ✓ **Data analytics and reporting** available to all participants, simpler CoC auditing
- ✓ Linked to Digital Audit Reports & Risk Assessments, it will provide core data for **EUDR Due Diligence reporting**

The upcoming FSC Digital landscape



FSC Due Diligence Reporting System

Synthesized **Due Diligence Statements** combining forest data from all sources contributing to a product



FSC Blockchain

to connect forest data to intermediate & final products

- Tracking product from one CH to the next
- Automated onboarding and analytics for CHs
- Materials accounting on processing batches
- Managing data sharing



Species Data

Data Warehouse



Geolocation

Harvesting Plot data captured in FSC Blockchain

GIS Platform will manage forest boundary data, including, optionally, cadastral data on legal land parcels



Digital Audit Reports

Including new **CW DDS Digital Audit Reports** will provide consistent forest data across FSC certified forests & Controlled Wood source forests



Risk Assessment Library

Library with spatial visualization of new risk assessments managed as a data product

Unified Risk Assessment Framework so that CHs can understand and visualize the deforestation risks present in their supply chains

- System under development / roll out
- Existing system to be upgraded

Thank you



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www.fsc.org